

### Remarks

Reconsideration of the application is requested. The specification has been amended by adding a claim to priority from U.S. Application Serial No. 08/742,819, filed October 20, 1996, and to correct a minor informality noted by the Examiner. Claims 5-8 and 13-34 have been cancelled without prejudice to their being pursued in divisional and continuation-type applications. Claims 35-37 have been added and generally correspond to claims 1, 2 and 4 that were initially presented in the application but were cancelled by preliminary amendment. Claim 35 is generic to the invention of elected Group III, as well as the elected downcomer and weir species. Claims 36 and 37 are readable on the elected downcomer species. A declaration from Michael Binkley is submitted herewith describing a prior sale activity and attaching photographs illustrating a feature of the invention. Claims 35-37 are the only claims presently in the application.

The Examiner is thanked for his helpful and courteous demeanor during the personal interview conducted with the undersigned and Applicant's representatives Neil Yeoman and Michael Binkley on October 15, 1998. During the interview, Applicant discussed a sale<sup>1</sup> of the invention that occurred more than one year prior to the filing date of the present application. Applicant explained that the sale should not constitute a bar under 35 U.S.C. §102 because (i) the claimed invention was disclosed in Figs. 2 and 3 of U.S. Application Serial No. 08/742,819 from which the present

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1. This is the sale referred to as the "Korean job" in the letter dated November 21, 1997 from Applicant's original attorney, Jeffery Bacon, to Larry Burton, one of the recalcitrant inventors. This letter was attached as Exhibit C to the declaration of Michael Binkley submitted with the Petition for Acceptance of Declaration under 37 CFR §1.47 on December 5, 1997.

application now claims priority, and (ii) the filing date of the priority application is less than one year after the activities relating to the prior sale.

The discussion then focused on whether Figs. 2 and 3 of the priority application adequately disclosed a downcomer outlet having a center “pinch point”, i.e. an outlet in which the lower edge of the wall region is closer to the wall of the process tower at the center than at the opposing end portions so that more liquid flows through the opposing end portions of the downcomer outlet than through the center of the downcomer outlet. Applicant demonstrated a model of a tower containing a downcomer of the type disclosed in Figs. 2 and 3 to better illustrate the pinch point shown in perspective views in Figs. 2 and 3. It was agreed that Applicant would submit photographs of the model from the same perspective shown in Fig. 2 and from a top plan view.

Applicant then discussed the Keller reference and contrasted its teachings with the invention of claim 1. Keller teaches that the flow of liquid across a tray can be regulated, after liquid is already on the tray, by using vertically staggered “fingers” that constrict liquid flow in the center portion of the tray by reducing the vertical clearance between the tray and the overlying fingers. The present invention, by contrast, is directed to restricting the horizontal dimension of the downcomer discharge outlet so that liquid flow is regulated before it is discharged onto the tray. As disclosed in the application, the primary advantage to Applicant’s invention is more of the underlying tray can be utilized as a perforated active area where vapor and liquid interaction occur, rather than functioning as an unperforated inlet area as in Keller. The simpler design and construction of the Applicant’s invention as contrasted with Keller was also noted.

The Lee et al. reference was also discussed and Applicant pointed out how it does not disclose a pinch point and the combination of Keller’s teachings with Lee et al. would not lead one

of ordinary skill in the art to restrict the horizontal dimension of the downcomer outlet as taught only by Applicant.

The difference in the inventorship between the present application and the priority application was then discussed and Applicant agreed to discuss in the present response whether a rejection under 35 U.S.C. § 102(a), (e), (f) or (g) was proper.

The interview concluded with a brief discussion of the Kittel reference and the favorable European search report and Applicant agreed to add the Kittel reference to the Information Disclosure Statement that was being filed following the interview. The undersigned did not have a copy of the Kittel reference at the interview and the Examiner indicated that a copy need not be included with the Information Disclosure Statement since he could readily obtain the reference.

As promised during the interview, Applicant is submitting herewith a declaration from Michael Binkley describing the prior sale activity and establishing that it did not occur more than one year prior to the filing date of the priority application. As such, the prior sale activity is not a barring activity with respect to the invention illustrated in Figs. 2 and 3 of the priority application and presently claimed herein.

Mr. Binkley's declaration also includes photographs of the model demonstrated during the interview. The photographs generally reproduce the perspective view shown in Fig. 2 of the priority application and include a top plan view that also shows the pinch point seen in the perspective view. Because the tray shown in the model was constructed from transparent material and to facilitate illustration of the pinch point, red and blue rings were applied to the top surface of the tray. The red ring has an inner radius corresponding to the inner radius of the downcomer outlet

at the pinch point, while the blue ring has an inner radius generally corresponding to the inner radius of the opposing ends of the downcomer outlet.

By the present amendments to the claims, the claimed invention is fully supported by the disclosure in Figs. 2 and 3 of the priority application. As such, the prior sale activity does not constitute a bar to claims 35-37.

Moreover, it is believed that there is no basis for a rejection of claims 35-37 under 35 U.S.C. § 102(a), (e), (f) or (g) based on the disclosure of that invention in Figs. 2 and 3 of the priority application. Even though the priority application names a different inventive entity, it does not qualify as prior art under § 102(a) because (i) the invention of claims 35-37 is fully supported by and is entitled to the filing date of the priority application, and (ii) joint inventor Leon Fan signed an oath on behalf of himself and the other inventors in the present application in which he alleged that the named inventors were the original, first and joint inventors of the claimed subject matter. As a result, the disclosure of the same invention in the priority application did not occur “before the invention thereof by the applicant for patent” as required by § 102(a). Although there are other potential grounds for removing the priority application as a reference, i.e. Rule 130, 131 and 132 affidavits, these affidavits are unnecessary in the present situation where the claimed subject matter is fully supported by the disclosure in the priority application, there is a valid claim to priority under 35 U.S.C. § 120, and there is an oath on behalf of all the inventors establishing that they are the original, first and joint inventors of the claimed subject matter.

The same rationale discussed above with respect to §102(a) would be applicable to any rejection under § 102(e), in the event the priority application should issue as a patent, or under § 102(g). Similarly, no rejection under § 102(f) is proper because the mere disclosure in the priority

application of subject matter claimed in the present application does not raise a presumption that the inventors named in the priority application are the inventors of the presently claimed subject matter so as to justify a rejection under 35 U.S.C. § 102(f). See MPEP 7th ed. § 716.10, second paragraph.

Moreover, because the combination of Keller and Lee et al. does not render obvious the claimed invention for the reasons discussed above, it is believed that the application is now in condition for allowance and such favorable action is requested. If the Examiner should feel that a telephone interview would facilitate resolution of any remaining issues, he is asked to contact the undersigned at the number indicated below.

Respectfully submitted,

A handwritten signature in black ink, appearing to read "Michael B. Hurd". The signature is fluid and cursive, with the first name "Michael" being more prominent.

Michael B. Hurd  
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November 30, 1998

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